

ENVIRONMENTAL ON-SITE START-UP MEETING

PROJECT: KLAARSTROOM OXIDATION PONDS

DATE OF STARTUP MEETING: (1) 24 FEBRUARY 2020 & (2) 12 March 2020

Mandatory pre-construction start-up meeting, as required by the approved Environmental Management Plan (EMP) for all construction phases of the project. The aim of this report is to reflect the EMP discussions and agreements as well as additional site-specific discussions and agreements discussed and agreed upon for the construction phase of this project.

Abbreviations used in this report

EA	Environmental Authorization
ECO	Environmental Control Officer
EMP	Environmental Management Plan (Approved within the EA)

1. INTRODUCTION

EnviroAfrica was appointed to perform the duties of the ECO for all phase of the construction of the project.

1.1 Contract team

EMPLOYER	CONSULTING ENGINEER / MAIN CONTRACTOR	ENVIRONMENTAL CONTROL OFFICER	CONTRACTOR/ SUPERVISOR	SITE
Price Albert Municipality Mr Ashley America Email:ashley@pamun.gov.za Tel: Cell 0798691342	Bvi Consulting Engineers Email: gertm@bvinc.co.za Tel: 054 337 6600 Cell: 0722219098	EnviroAfrica CC Mr. BERNARD DE WITT P.O. Box 5367 HELDERBERG, 7135 Email: bernard@enviroafrica.co.za Tel: (+27)21 – 851 1616 Cell: (+27)82 – 4489991	DeJagersLoodgieter Kontrakteur Email: hennie@karoonetwerkbw.co.za Tel: Cell 0832828507	

The site agent for the contractor will be Mr. Luaan Joubert of **De Jager's loodgieter kontrakteur** (0832570110). Mr. Joubert will be responsible for the construction phase as well as the day to day management of the site, including ensuring compliance with the environmental conditions of the EA and EMP.

1.2 List of attendees: on-site start-up meeting

The on-site start-up meeting was held at the proposed construction location of the project. The following persons attended the meeting.

NAME	COMPANY	TEL	EMAIL
Gert Meiring	Bvi Consulting	072 221 9098	gertm@bvinc.co.za
A America	Prince Albert Mun	079 869 1342	ashley@pamun.gov.za
Hennie de Jager	De Jager Loodgieter	083 282 8507	hennie@karoonetwerkbw.co.za
Luaan Joubert	De Jager Loodgieter	083 257 0110	luaanjoubert8@gmail.com
Bernard de Witt	EnviroAfrica	0824489991	bernard@enviroafrica.co.za

The main purpose of the meeting was to ensure that the construction is done in accordance with the approved EA and EMP and in order to discuss specific on-site conditions – including site specific arrangements with regards to the construction method and associated activities in terms of the EMP.

2. SITE SPECIFIC CONDITIONS OF THE EA

The following are the main issues addressed in the EA, pertaining to this phase of construction.

THE CONDITIONS OF THE EA AND RECOMMENDATIONS OF THE BASIC ASSESSMENT REPORT (BAR) WAS DISCUSSED WITH ALL ON SITE. THE FOLLOWING CONDITIONS WERE SPESIFICLY POINTED OUT

Conditions as per EA:

The Environmental authorization was discussed with the contractor and specific reference to:

- 1 Topsoil stripping and conservation thereof
- 2 Demarcation and the maintenance thereof
- 3 Mandatory site equipment
- 4 Storing of fuel
- 5 Waste removal
- 6 Rehabilitation of site
- 7 REMOVAL OF SLUDGE

Condition AS PER BAR:

All conditions as per BAR must be adhere to except where the EA stipulates differently

3. SITE SPECIFIC CONDITONS OF THE EMP

Refer to the EMP in the site file, which include methods to be used for any and all construction activities envisioned.

4. POINTS OF DISCUSSION & AGREEMENTS

4.1 Environmental Management Plan

A copy of the EMP was handed to the construction site supervisor. A presentation of the EMP and its contents was carried out by the ECO to outline the function and objectives of the EMP. The following key issues were discussed and agreed upon:

- The Environmental Management Plan [EMP] must be implemented and adhered too throughout the entire construction phases.
 - Declaration of understanding (DOU) was signed by the Contractor Representative.
- The Site Supervisor is responsible to ensure day-to-day compliance to the conditions as detailed in the EMP.
- No change or deviation from any condition as detailed in the EMP is allowed without the approval of the COMPETANT AUTHORITY and the ECO, and in consultation with the Consulting Engineer.
- The EMP must be kept on site and presentable to any person of authority wishing to view the EMP.

4.2 Environmental Authorization

An overview of the EA (a copy of which must be kept within the site file) was presented and discussed at the Start-Up Meeting, and, in particular the relevant construction “Conditions of Authorisation” (Refer to paragraph 2, above).

Refer to Environmental Authorization, Ref no. 16/3/3/1/C2/3/0008/19 ,

Dated. 25 November 2019

4.3 Demarcation

A collective discussion on the required construction space/footprint needed to affectively carry out the day-to-day construction activities throughout the entire construction activities resulted in the following agreements: Agreement (See description & drawing)

- During the construction phase the site boundaries will be demarcated with **poles and steel wire**. Wherever possible the construction boundaries will be the minimum area needed for construction, site offices and storage.
- All areas disturbed will form part of the rehabilitation.

- All areas outside the demarcation boundary lines of the construction site are considered “**NO-GO**” areas and must be observed by all construction personnel.

4.3.2 Description and Drawings

See figure 2 (p9) and 3 (p13) of the Klaarstroom WWTW upgrade EMPR .



4.4 Entrance and haul roads

All construction vehicular movement to the construction site must observe all relevant municipal and provincial traffic by-laws and safety standards. Only existing approved roads will be used as entrance and haul roads.

- Access to the site (for construction AND MAINTENANCE purposes)
- The contractor supervisor must ensure that all subcontractors, delivery vehicles and all other construction vehicles are aware of these rules and that they are applied.
- Only existing access roads to be used
- Vehicle movement inside the demarcation is allowed for construction purpose
- No vehicle movement outside demarcated areas and existing roads will be allowed

4.5 Power line/cable

No power lines will be constructed

4.6 Search & rescue

No search and rescue of plants is required

4.7 Clearing of vegetation & topsoil conservation

- All plant material to be collected and stored in demarcated area for rehabilitation purposes.
- The plant material to be used as part of rehabilitation of disturbed areas
- TOPSOIL – 3 cm of topsoil to be removed and stored in demarcated area
- Topsoil to be used during rehabilitation of disturbed area
- It was agreed that topsoil be used to rehabilitate the stormwater berm and trench .

4.8 Temporary storage/Stockpile area/s and workers camp

- All stockpile to be taken place inside the demarcated area.
- All materials to be stored on builders plastic or similar material
- Workers eating and resting area to be inside demarcated area
- No overnighting allowed on site (except for security purposes)

4.9 Mandatory site equipment

The ECO outlined the following Mandatory Site Equipment that must be placed on site before any construction activities may take place:

4.9.1 Toilet facilities

Suitable and acceptable toilet/ablution facilities must be placed on site and must comply too the EMP. Toilet facilities must be maintained on a regular basis and be of a hygienic standard at all times.

- It was agreed that toilets be placed at the construction camp/site office

4.9.2 Fire Fighting Equipment:

Adequate and acceptable SABS approved and service certified dry powder fire fighting extinguishers must be placed at visible and strategic points around the construction site.

- It was agreed that at least 2 fire extinguishers will be on site.
- No “hot-works” may be carried out without a fire extinguisher nearby.

4.9.3 Rubbish bins (Waste Management): See point 4.10

4.9.4 Drip trays: See point 4.11

4.10 Waste Management

4.10.1 General waste

The contractor must place sufficient and suitable waste bins at central points around the construction site.

- Adequate waste/rubbish **bins** will be placed throughout the construction site. Re-use and recycling must be factored into the waste management.
- General waste: it was agreed that bins will be emptied on a regular basis and contents will be disposed of at a REGISTERED DUMP SITE
- NB – care must be taken to prevent rubbish to be blown into the veld
- NB - Smoking is allowed inside the demarcated area. Special container for cigarette butts must be placed on site. Workers must be made aware of fire danger and also that finding cigarette butts laying around on site is a penalty offence.

4.10.2 Construction related waste

The site must be kept clean and appropriate facilities for temporary storage of all waste must be provided. All building materials and builders’ rubble that requires on-site storage must be appropriately covered to prevent potential wind impact.

- All **construction waste/builders rubble** must be regularly removed to a registered waste disposal site approved by the Municipality.
- **Construction spoil** (other than topsoil)
The client requested that any surplus excavation material be stockpiled at the Municipal waste dump site for management purposes

4.11 Drip Trays

4.11.1 Drip Trays for the containment of accidental fuel spills:

Suitable drip trays must be placed and available on site in the event accidental fuel spills or leaks.

- It was agreed that AT LEAST ONE DRIP-TRAY TO BE ON SITE. The drip tray to be available when refuelling takes place and in case of an emergency spillage
- In case of any spillage the ECO must be informed and an environmental Incident report must be completed. The area must be treated with an “oil spill kit” like **oilcap distributed by Pineland Environmental Technology.**

4.12 Concrete/cement works (Wet works)

- All concrete work must be done in accordance with the EMP requirements.
- All wet works to be conducted on builder’s plastic.
- Ready mix – NB no washing of ready-mix trucks allowed. All cement/concrete wastewater must be collected in a settlement pond.
- All sand and concrete stone to be stored on builders plastic

4.13 Heritage & Archaeological requirements

A brief overview of the mandatory requirements and regulations pertaining to the discovery or unearthing of any Heritage or Archaeological artefacts which would include bones, ceramics, and existing grave site works.

- It was agreed that should any Heritage or Archaeological artefacts be discovered, all work in that location will immediately be suspended and the ECO and SAHRA will be contacted immediately.
- The ECO will also verify and check for any such artefacts during his site inspections.

5. METHOD STATEMENTS REQUESTED BY THE ECO

The ECO requires the submission and approval of the following construction related Method Statements with regards to the works to be performed:

1. Demarcation – As agreed at start-up meeting
2. Clearing of vegetation – As agreed at start-up meeting
3. topsoil and topsoil conservation – See 4.6. (As agreed at start-up meeting)
4. Temporary storage & stockpiling. See 4.7 - (As agreed at start-up meeting)
5. Waste management / control. See 4.9 – (As agreed at start-up meeting)
6. Construction related waste / builder’s rubble - (As agreed at start-up meeting)
7. Spoil - (As agreed at start-up meeting)
8. Ready-mix truck management – (As agreed at start-up meeting)
9. Concrete mixing on site - (As agreed at start-up meeting)
10. Rehabilitation - METHOD STATEMENT REQUIRED

6. ADDITIONAL INFORMATION REQUIRED BY THE ECO

The following additional site-specific information was requested by the ECO to be supplied to EnviroAfrica:

- Final approved construction layout plans (as built)
- Rehabilitation of works area to be discussed

7. CONTRACTOR'S WEEKLY ENVIRONMENTAL REPORT

The contractor must on a weekly basis complete the contractor's weekly environmental report (included in the EMP) and keeps a copy in the onsite file for the ECO to sign.

8. ENVIRONMENTAL AWARENESS INDUCTION TRAINING

A mandatory Environmental Awareness Induction session be conducted with the work team operating on site.

- The contractor must schedule such training at the soonest after the works have started.
- The contractor must ensure that all in-coming sub-contractors are taken through the Environmental Awareness Induction session before commencement of site works.

9. DECLARATION OF UNDERSTANDING

Upon completion of the on-site Start-Up Meeting, the site supervisor Completed and signed the mandatory Declaration of Understanding (DOU).

Refer to the signed copy of the declaration within the Environmental file and EMP.

NB all **sub-contractors** must sign a copy of the DOU and kept on the site register

10. LINES OF COMMUNICATION

NAME	COMPANY	TEL	EMAIL
Gert Meiring	Bvi Consulting	072 221 9098	gertm@bvinc.co.za
A America	Prince Albert Mun	079 869 1342	ashley@pamun.gov.za
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Luaan Joubert	De Jager Loodgieter	083 257 0110	luaanjoubert8@gmail.com
Bernard de Witt	EnviroAfrica	0824489991	bernard@enviroafrica.co.za

Yours sincerely,

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